



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OFFICE OF PREVENTION, PESTICIDES AND TOXIC SUBSTANCES

October 19, 2007

MEMORANDUM

SUBJECT: Effects Determinations for Bromacil and Bromacil Lithium Relative to the California Red-Legged Frog and Designated Critical Habitat

FROM: Thomas Steeger, Ph.D., Senior Biologist *Thomas Steeger 10/19/07*
Environmental Risk Branch 4
Environmental Fate and Effects Division

TO: Arthur-Jean B. Williams, Associate Director
Environmental Fate and Effects Division

Attached is the assessment of potential direct and indirect effects to the California red-legged frog (CRLF) and potential modification to designated critical habitat from uses of the herbicides bromacil and bromacil lithium. While the Endangered Species Act requires we assess uses of pesticides relative to any potentially affected listed species, this assessment focuses only on the CRLF, including designated critical habitat, addressing provisions of a settlement agreement entered into by the federal government to resolve claims made by plaintiffs against EPA in a court case (CBD v. EPA¹).

The attached assessment was conducted consistent with the Agency's Overview Document². Effects determinations for this assessment are summarized below.

- The assessment resulted in a determination that the use of pesticide products containing bromacil and its lithium salt may effect, and is likely to adversely affect (LAA) the California red-legged frog. This determination is based on bromacil's potential to both directly and indirectly affect the species.
- Bromacil is likely to directly affect the CRLF in terrestrial habitats due to chronic exposures resulting from applications of bromacil and bromacil lithium at their maximum use rates.
- Potential indirect effects include a reduction in prey in aquatic habitats, specifically algae and effects to aquatic and terrestrial habitats.

¹ Settlement agreement of October 20, 2006: Center for Biological Diversity v. United States Environmental Protection Agency. Civ. No: 02-1580-JSW(JL)).

² Overview of the Ecological Risk Assessment: Process in the Office of Pesticide Programs, U.S. Environmental Protection Agency: Endangered and Threatened Species Effects Determinations: January 23, 2004.

- Labeled uses of bromacil and bromacil lithium within the action area may modify the designated critical habitat of the CRLF.
- **Tables 1 and 2** of the executive summary of the Pesticide Effects Determination document provides a more detailed account of the effects determination for the two use categories of bromacil and bromacil lithium (i.e. citrus and non-cropland areas).

As required by the Alternative Consultation Agreement EPA entered into with the U.S. Fish and Wildlife Service and National Marine Fisheries Service (Services), I have been trained by the Services to make such determinations. Additionally, this assessment was subjected to internal Agency peer review throughout its development. The review panel included other scientists who have been trained by the Services to make such determinations (Dr. Melissa Panger).

Please let me know if you have any questions regarding this assessment and effects determination for bromacil and its lithium salt relative to the CRLF and its designated critical habitat.

cc: Steven Bradbury
Debbie Edwards

Attachments